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Correspondence

The rules of computerized cardiotocography and middle cerebral artery for diagnosis of fetomaternal hemorrhage



Dear Editor,

I read with an interest the comment by Dr. Cozzoline [1] suggesting the importance of fetal computerized cardiotocography (CTG) and cerebral Doppler evaluation for the patients of fetomaternal hemorrhage with decreased fetal movements. The usefulness of fetal cerebral Doppler has been well-reviewed in cases of massive fetomaternal hemorrhage suggested by Dr. Cozzoline; however, I am afraid the limitations of fetal cerebral Doppler evaluation in the early staged fetomaternal hemorrhage.

During the past several years, 26 cases of fetomaternal hemorrhage resulted in adverse neonatal outcomes (neonatal death or cerebral palsy) with decreased fetal movements have been reported in Japan [2]. In 3 cases of these (12%), reassuring fetal status was observed in the CTG at the first obstetric consultation due to the feeling of decreased fetal movements. They were allowed to go home based on the CTG findings. In the 3 cases, fetal cerebral Doppler evaluation was not performed at their first consultations. One to several days later, they visited the obstetric facilities again due to the feeling of sustained decreased fetal movements. At their second visits, severe decelerations and/or bradycardia were observed in the CTG requiring forced delivery.

To confirm the usefulness of fetal cerebral Doppler in the cases of fetomaternal hemorrhage with decreased fetal movements, a

further study of fetal cerebral Doppler in cases of early staged fetomaternal hemorrhage with reassuring fetal status in the CTG is needed.

Conflicts of interest

The author declares that there are no conflicts of interest.

References

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- [2] Suzuki S. To elucidate the pathophysiology of fetomaternal hemorrhage (in Japanese). *Acta Obst Gynaec Jpn* 2017. in press.

Shunji Suzuki*

Department of Obstetrics and Gynecology, Japanese Red Cross
Katsushika Maternity Hospital, 5-11-12, Tateishi, Katsushika-ku,
Tokyo 124-0012, Japan

* Fax: +81 3 3694 8725.

E-mail address: czg83542@mopera.ne.jp.